

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Parts 1, 21, 73, 74 and 101 of the)	WT Docket No. 03-66
Commission's Rules to Facilitate the Provision of Fixed)	RM-10586
and Mobile Broadband Access, Educational and Other)	
Advanced Services in the 2150-2162 and 2500-2690)	
MHz Bands)	
)	
Part 1 of the Commission's Rules - Further Competitive)	WT Docket No. 03-67
Bidding Procedures)	
)	
Amendment of Parts 21 and 74 to Enable Multipoint)	MM Docket No. 97-217
Distribution Service and the Instructional Television)	
Fixed Service to Engage in Fixed Two-Way)	
Transmissions)	
)	
Amendment of Parts 21 and 74 of the Commission's Rules)	WT Docket No. 02-68
With Regard to Licensing in the Multipoint Distribution)	RM-9718
Service and in the Instructional Television Fixed Service)	
for the Gulf of Mexico)	
)	

REPLY COMMENTS OF CLEARWIRE CORPORATION

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EXECUTIVE SUMMARY

The Commission is at a cross roads in its ongoing efforts to promote the deployment of high speed, broadband services in the 2.5 GHz band. In this proceeding it now must choose whether to facilitate near term vigorous competition to cable, entrenched wireless, and incumbent telephone company broadband services or to allow this long underutilized spectrum to continue to go unused for perhaps another 10 years.

Most of the commenters in this proceeding offer a virtual smorgasbord of anticompetitive ways to further delay, weaken or eliminate various Commission initiatives designed to encourage rapid deployment of wireless broadband services in the 2.5 GHz band. Specifically, many commenters recommend: (1) delay of auctions for unused spectrum; (2) ineffective substantial service safe harbors that will not promote widespread deployment of wireless broadband services; (3) delay of substantial service demonstrations for EBS and BRS licensees for nine to 10 years; and (4) evaluation of substantial service demonstrations on a “system-wide basis” that will guarantee that spectrum goes unused for indefinite periods.

Clearwire, a new entrant deploying high speed, two-way wireless broadband service in the 2.5 GHz spectrum band, has offered a number of proposals designed to allow the Commission once and for all to require the near term build-out of broadband networks, and the effective and efficient use of this spectrum to serve U.S. consumers. Specifically, Clearwire proposes the following: (1) substantial service demonstrations required no later than five years after the effective date of the new rules; (2) adoption of meaningful safe harbors that will ensure widespread deployment of wireless broadband services; (3) adoption of a reliability standard as part of the safe harbors for EBS and BRS; (4) demonstration of substantial service on a per license / per channel group basis with no credit for discontinued services; (5) prompt auction of

spectrum for which substantial service is not timely demonstrated; (6) limited substantial service exemptions for EBS licensees whose spectrum is leased 95 percent for commercial purposes; (7) auction of vacant spectrum at the earliest possible time after adoption of the order on reconsideration in this proceeding; and (8) scheduled auctions at specified intervals to allow unused spectrum to be assigned to committed service providers that will put it to its highest and best use.

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REPLY COMMENTS OF CLEARWIRE CORPORATION

Clearwire Corporation ("Clearwire"), through counsel, files reply comments to the *Further Notice*¹ in the above-captioned proceeding. Clearwire urges the Commission to promptly adopt procedural and substantive rules for the Broadband Radio Service ("BRS") and the Educational Broadband Service ("EBS") that will ensure that promising 2.5 GHz spectrum

¹ *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004) ("*Further Notice*" or "*Report and Order*"). All comments and petitions for reconsideration submitted in this proceeding on January 10, 2005, will hereinafter be short cited.

at long last will be fully deployed to offer wireless broadband services to U.S. consumers.² The Commission should resist any efforts to delay, weaken or eliminate its proposals to facilitate this result.

I. THE COMMISSION MUST ADOPT RIGOROUS SUBSTANTIAL SERVICE DEMONSTRATIONS TO FACILITATE NEAR TERM DEPLOYMENT IN THE BAND.

A. The Commission Should Require Substantial Service Demonstrations Within Five Years.

The Commission should reject out of hand multiple commenters' proposals to delay substantial service showings for BRS and EBS licensees for up to 10 years from now. An extended delay would deprive U.S. consumers of additional competitive choices for broadband services and thwart the Commission's well-considered plan to finally bring into use spectrum that has not been fully and efficiently utilized for more than 30 years. Clearwire, a new entrant that is rapidly introducing wireless broadband services in multiple markets, is virtually alone in proposing an aggressive but achievable substantial service showing within five years after the effective date of the new rules.³ If the Commission is to realize its objective of encouraging *prompt* delivery of service, *rapid* deployment of new technologies, and *speedy* transitions and

² Clearwire supports the comments of the Wireless Communications Association International ("WCAI") with respect to the following issues and will not address them here: (1) the proper timing for self-transitions; (2) no bidding credits for designated entities; and (3) no bar to commercial support for the EBS white space auction. Clearwire supports the reply comments of the Catholic Television Network / National ITFS Association ("CTN/NIA") and the Hispanic Information and Telecommunications Network ("HITN") with regard to the resolution of the four channel limitation for EBS.

³ Clearwire Comments at 9, 18. Assuming an effective date of January 10, 2005, Clearwire proposes that substantial service demonstrations would be required on January 10, 2010 unless the "effective date" is reset by the Commission in the order on reconsideration.

deployments,⁴ it is entirely reasonable to require BRS and EBS licensees to demonstrate their commitment to providing service in the 2.5 GHz band within five years.

Commenters, including BellSouth, Nextel, Sprint, WCAI, CTN/NIA, and the ITFS – 2.5 GHz Mobile Wireless Engineering & Development Alliance (“ITFS Alliance”) utterly fail to justify why committed BRS and EBS licensees should be given nine to 10 years from now,⁵ multiple lifetimes in the broadband access market, to provide substantial service to their customers.⁶

⁴ See *Report and Order*, 19 FCC Rcd at 14167 ¶ 1, 14254 ¶ 232; *Further Notice*, 19 FCC Rcd at 14282-83 ¶ 321; *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Notice of Proposed Rulemaking and Memorandum Opinion and Order, 18 FCC Rcd 6722, 6741 ¶ 36 (2003) (noting that this proceeding provides the Commission with an opportunity to further its spectrum management goal to “encourage the highest and best use of spectrum domestically and internationally in order to encourage the growth and *rapid* deployment of services.”) (emphasis added) (citing *FCC Strategic Plan for 2003-2008*, available at www.fcc.gov/omd/strategicplan).

⁵ HITN similarly proposes that EBS licensees should not be required to make substantial service demonstrations until 2015. HITN Comments at 3.

⁶ These commenters would delay substantial service demonstrations until approximately July 10, 2014. They propose that a license that expires within five years of completing the transition should be renewed, conditioned on a substantial service demonstration within five years after the post-transition notification date. BellSouth Comments at 13-14; Nextel Comments at 3-4; Sprint Comments at 9-10; WCAI Comments at 16-17; CTN/NIA Comments at 8; ITFS Alliance Comments at 8. Assuming a January 10, 2005 effective date, adding three years to initiate a transition, 18 months to complete the transition and file the post-transition notification, and five years as suggested by WCAI, Nextel, Sprint, BellSouth, NIA/CTN and the ITFS Alliance, translates into substantial service demonstrations on or about July 10, 2014. Surprisingly, the ITFS Alliance also suggests that advanced two-way operations that are provided in the marketplace today should not be permitted until conclusion of the transition. ITFS Alliance Petition for Reconsideration at 6; ITFS Alliance Comments at 3. For all the reasons stated herein, such a result does not support the Commission’s goals in this proceeding and is not in the public interest.

Even the most cursory review of the “transition” requirements outlined in the *Report and Order*⁷ shows that nine to 10 years is not required to demonstrate substantial service if a licensee is truly committed to rolling out 2.5 GHz services. “Transitioning” spectrum involves ceasing legacy operations on all channels and, as necessary, migrating video programming and data transmission tracks to the Middle Band Segment (“MBS”). The Commission allows in excess of three years for this process alone.⁸ Upon completion of the transition, the proponent files a post-transition notification that the transition is complete, all licensees are “operating” according to the new rules,⁹ and all transitioned licensees are “operating” on their new frequencies.¹⁰ Therefore, as of the post-transition notification (which can be filed anytime between now and July 10, 2009),¹¹ transitioned licensees will already be “operating” on spectrum under the new band plan. Affording an additional five years for substantial service demonstrations, until July 10, 2014, is not needed and serves merely to allow this spectrum to remain fallow.¹²

⁷ *Report and Order*, 19 FCC Rcd at 14197-14208 ¶¶ 72-103.

⁸ For all licensees, even those that wait until roughly January 10, 2008 to file an initiation plan, the Commission affords an 18-month period to complete the transition, unless completion is delayed by pending dispute resolution. *Report and Order*, 19 FCC Rcd at 14203 ¶ 88.

⁹ *Report and Order*, 19 FCC Rcd at 14203 ¶ 88, 14207 ¶102.

¹⁰ *Id.*

¹¹ The July 10, 2009 date includes the 18 months that the Commission affords licensees to complete the transition, even those that wait until January 10, 2008 to file initiation plans. *Id.* at 14203 ¶ 88.

¹² Concerns raised by Nextel and WCAI about requiring premature substantial service demonstrations are unfounded. Nextel states that substantial service should not be measured “during” the transition, and Nextel and WCAI both voiced concerns that requiring substantial service demonstrations in the near term will result in licensees focusing resources on preserving legacy services out of fear of losing their authorizations. Nextel Comments at 3-4. No proposal advanced in this proceeding would require substantial service demonstrations until well after the transition concludes. In addition, except for licensees that “opt out” or file waivers, prior

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Facilitating broadband deployment is one of this Administration's and the Commission's highest priorities. President Bush recently stated that the United States must "have broadband in every household in America by the year 2007."¹³ Nonetheless, the Commission cannot advance near term deployment of wireless broadband services at 2.5 GHz if it allows licensees 10 years to initiate services in the band. Given the historic underutilization of EBS/BRS spectrum, the public interest will be badly served and government policies undermined if the Commission allows this spectrum to remain underutilized until 2014.

The Commission acknowledged in the *Report and Order* that the BRS industry offers "a significant opportunity to provide competition to cable and [DSL] services in the provision of broadband services in urban and rural areas."¹⁴ This potential has yet to be realized. As of June 2004, the Commission estimated that cable and DSL accounted for 74.8 percent and 16.1 percent

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operations on legacy systems must be discontinued as of the post-transition notification, and new services commenced. *Report and Order*, 19 FCC Rcd at 14203 ¶ 88, 14207 ¶ 101. The question for the Commission is whether licensees should be afforded two (2) years or five (5) years post-transition to prove deployment of services.

¹³ See White House Briefing, Remarks by President Bush in Conversation on Health Care Information Technology at the Department of Veterans Affairs Medical Center, Baltimore, Maryland, Federal News Service, Apr. 27, 2004; see also *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, Declaratory Ruling and Notice of Proposed Rule Making, 17 FCC Rcd 4798, 4801-02 ¶ 4 (2002), citing Section 706 of the Telecommunications Act of 1996, codified at 47 U.S.C. § 157; *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possibly Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Third Report, 17 FCC Rcd 2844, 2845-46 (2002) ("The widespread deployment of advanced services has become a central communications policy for the Commission.").

¹⁴ *Report and Order*, 19 FCC Rcd at 14168 ¶ 3.

of the market for advanced services, respectively.¹⁵ In contrast, satellite or wireless accounted only for 0.4 percent of the advanced services market, a market share that has not increased since 2000.¹⁶ If the Commission adopts a 10-year, rather than a five-year substantial service requirement for EBS and BRS licenses, it will ensure that wireless broadband will not effectively compete with cable and DSL in the near term, and that broadband monopolies or duopolies will continue unchallenged in many markets, particularly rural and underserved areas, to the detriment of consumers.¹⁷

B. Substantial Service Safe Harbors For EBS And BRS Will Support The Commission's Goal Of Making Broadband Available To All Consumers.

The Commission should adopt a safe harbor for EBS and BRS substantial service demonstrations that will advance its goal of promoting expeditious and widespread deployments of wireless broadband services.¹⁸ Clearwire proposes that within five years of the effective date of the *Report and Order*, each authorization holder must construct EBS or BRS stations for each license, or each channel group covered by a Basic Trading Area (“BTA”) authorization. Each station must transmit signals capable of providing reliable broadband service to two-thirds of the

¹⁵ See Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of June 30, 2004*, Chart 4 (Dec. 2004), available at <http://www.fcc.gov/wcb/iatd/comp.html> (reporting the number of advanced service lines by technology for services transmitting at more than 200 kpbs in both directions).

¹⁶ *Id.*

¹⁷ The Commission has long recognized that both monopolies and duopolies are harmful to the market. See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, First Report, 10 FCC Rcd 8844 (1995); see also *1998 Biennial Regulatory Review Spectrum Aggregation Limits for Wireless Telecommunications Carriers*, Report and Order, 15 FCC Rcd 9219, 9256 ¶ 83 (1999) (“As we have extensively documented, the introduction of new providers and the end of the cellular duopoly has led to substantial consumer benefits through reductions in the price of service and in new and enhanced services”).

¹⁸ See generally Clearwire Comments at 12-21.

population in the geographic service area.¹⁹ The Commission should reject the substantially weaker safe harbors proposed by other commenters that would result in coverage to a mere 20 percent of the population in licensed urban areas within nine to 10 years, and even less coverage in rural areas.²⁰ Clearwire's safe harbor recommendation, unlike other commenters' proposals, will promote the Commission's goals.

Clearwire's safe harbor proposal mirrors existing substantial service requirements in other frequency bands, such as the 800 MHz and 900 MHz bands,²¹ and is supported by other commenters in the proceeding. IPWireless recommends that a finding of substantial service should be made if an operator builds and deploys a wireless broadband system that is capable of serving two-thirds of the population in 60 months (five years).²² Digital Broadcast Corporation proposes that if an MBS channel is not used to provide substantial service in five years, by January 10, 2010, the license should be forfeited.²³ Clearwire's proposed safe harbor incorporates and modifies the former BTA build out requirements for this spectrum which

¹⁹ *Id.* at 18.

²⁰ BellSouth, C&W Enterprises, Sprint, WCAI, and Grand Wireless collectively proposed the following safe harbors: (1) for fixed point-to-point services in urban areas, construction of four links per million; (2) for fixed point-to-multipoint services and mobile services in urban areas, coverage to at least 20 percent of the population of the licensed area; (3) for mobile wireless in rural areas, coverage to at least 75 percent of the geographic area of at least 20 percent of the rural areas; and (4) for fixed wireless in rural areas, construction of one end of a permanent link in at least 20 percent of the rural areas in the licensed area. BellSouth Comments at 6-9; C&W Enterprises Comments at 2; Sprint Comments at 7-9; WCAI Comments at 8-9; Grand Wireless Comments at 1. Fixed "links" for EBS or BRS could either be defined as links used for backbone service, or as "fixed base transceiver stations" which are used to provide wireless services.

²¹ *See* 47 C.F.R. §§ 90.685(b); 90.665(c).

²² *Further Notice*, 19 FCC Rcd at 14286-87 ¶¶ 327-28.

²³ Digital Broadcast Corp. Comments at 2.

provided that “within five years of the grant of a BTA authorization, the authorization holder must construct MDS stations to provide signals... that are capable of reaching at least two-thirds of the population of the applicable service area.”²⁴

WCAI’s assertion that Clearwire’s substantial service recommendation does not consider the difference between high-power deployments under the former regulatory regime, and low-power deployments under the new rules, is incorrect. Clearwire’s recent experience in launching wireless broadband service in multiple markets demonstrates that its recommendations for substantial service are reasonable. Specifically, Clearwire launched wireless broadband services in Jacksonville, Florida, six months ago. In this short time, Clearwire has deployed signals capable of covering 50 percent of the population in its Jacksonville geographic service area. Within six months, Clearwire intends to expand its service area by deploying additional base stations, and increase its coverage to 78 percent of the population in that geographic service area. In Abilene, Texas, Clearwire, in only eight months, deployed signals capable of reaching approximately 75 percent of the population in its geographic service area.

Although subscribership to broadband services almost tripled from 9.6 million in June 2001 to 28.2 million in December 2003, including in rural areas,²⁵ many areas of the United States remain unserved or lack meaningful competition for broadband services. As of December 2003, the Commission estimated that almost 27 percent of the lowest density zip codes in the

²⁴ Formerly 47 C.F.R. § 21.930(c)(1) (2004).

²⁵ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Fourth Report to Congress, FCC 03-251 at 28-29 (2004).

United States did not have access to broadband services.²⁶ A significant number of customers in other zip codes only have access to one, possibly two, broadband service providers.²⁷

The safe harbors adopted by the Commission should encourage EBS and BRS licensees to widely deploy broadband services by requiring 67 percent coverage of the total population within a geographic service area. The Commission always has the latitude to undertake a case-by-case analysis, and make a finding of substantial service, even if licensees do not achieve pre-determined statistical benchmarks. The Commission can consider other relevant factors, such as: (1) whether the licensee's operations serve niche markets, rural areas, discrete populations, remote areas and regions with special needs; (2) whether the licensee serves those with limited access to telecommunications services; (3) a demonstration that a significant portion of the population or land area of the licensed area is being served; and (4) whether the licensee offers specialized or technologically sophisticated premium service that does not require a high level of coverage to benefit customers.²⁸

²⁶ *Id.* at 30.

²⁷ See Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of June 30, 2004*, Table 13 (Dec. 2004), available at <http://www.fcc.gov/wcb/iatd/comp.html>.

²⁸ See, e.g., *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS")*, 12 FCC Rcd 10785, 10844 ¶ 113 (1997) (citations omitted) ("[T]he [FCC] may consider such factors as whether the licensee is offering a specialized or technologically sophisticated service that does not require a high level of coverage to be of benefit to customers, and whether the licensee's operations serve niche markets or focus on serving populations outside of areas served by other licensees."); see also *Rulemaking To Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies for Local Multipoint Distribution Service And for Fixed Satellite Services*, Second Report and Order, 12 FCC Rcd 12545, 12660-61 ¶¶ 268-270 (1997) (same); *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, 15 FCC Rcd 10456, 10470-71 ¶¶ 27-28 (2000) (same); *Chasetel Licensee Corp.*, 17 FCC Rcd 9351, 9354-56 ¶¶ 8-11 (2002) (A substantial service showing may include the provision of residential, cutting-edge

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The Commission should discount WCAI's opposition to using qualitative factors, such as reliability of service, as part of the safe harbor calculation.²⁹ As part of its safe harbor proposal, Clearwire recommends that signals must be deployed that are capable of offering *reliable* broadband service to two-thirds of the population in the geographic service area. Clearwire agrees with the Commission that safe harbors focusing solely on geography covered do not necessarily reflect the most important goal of "ensuring public access to quality, widespread service."³⁰ Coverage requirements do not take into consideration factors important to end users like reliability of service.³¹ Although WCAI opposes incorporation of qualitative factors in the safe harbors for EBS and BRS, it nonetheless urges the Commission in its petition for reconsideration to encourage licensees "to construct facilities that will provide reliable service."³²

The Commission should adopt a safe harbor that incorporates qualitative criteria like reliability of service that demonstrate "*actual service* to end users."³³ Reliable service could be

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niche services to "campus" populations (business and educational) that are sparsely populated after normal school or work hours.); 47 C.F.R. § 101.1413(b) (Three factors to be considered in acting upon a substantial service showing are: (1) whether the licensee's operations serve niche markets, rural areas, or those outside the service areas of other licensees; (2) whether the licensee serves those with limited access to telecommunications services; and (3) a demonstration that a significant portion of the population or land area of the licensed area is being served.).

²⁹ WCAI Comments at 7-8.

³⁰ *Further Notice*, 19 FCC Rcd at 14284 ¶ 323 (citation omitted).

³¹ *Id.*

³² WCAI Petition for Reconsideration at 43 (emphasis added).

³³ *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, Report and Order, 17 FCC Rcd 9980, 10010 ¶ 72 (2002) (emphasis added).

defined as wireless broadband service that provides, at a minimum, speeds of 512 kbps downstream and 64 kbps upstream, 99.99 percent of the time.³⁴

C. Licensees Must Demonstrate Substantial Service On A Per License / Per Channel Group Basis With No Credit For Discontinued Service.

For all wireless services in which the Commission requires substantial service demonstrations, the licensee itself must make the demonstration and prove substantial service for each of its licenses.³⁵ Consistent with this precedent, Clearwire proposes that the Commission evaluate substantial service demonstrations for EBS and BRS on a per license basis. For BTA authorizations covering multiple channels, a substantial service demonstration would be required on a per channel group basis in order to ensure full spectrum use and service to the public.³⁶ The

³⁴ Clearwire Comments at 18 n.38.

³⁵ The Commission applies its substantial service requirement to flexible use services on a per license basis, rather than on a system basis. *See, e.g.*, 47 C.F.R. § 27.14(a) (“AWS and WCS licensees must make a showing of ‘substantial service’ in their license area within the prescribed license term.”); *id.* § 101.1011(a) (“LMDS licensees must make a showing of ‘substantial service’ in their license area within ten years of being licensed.”); *id.* §§ 90.767(a), 90.769(a) (220 MHz service licensees “may provide substantial service to their licensed areas at the appropriate five- and ten-year benchmarks”); *id.* § 101.1413(b) (MVDDS licensees must show substantial service at the end of five years into the license period and ten years into the license period to obtain a renewal expectancy); *id.* § 95.833(a) (“Each 218-219 MHz [PRS] Service licensee must make a showing of ‘substantial service’ within ten years of the license grant.”).

³⁶ Clearwire Comments at 16-18. For example, if a BTA authorization covers M1, M2, the E-group, F-group and H-group channels, and if a substantial service demonstration is made only for the E-group and the F-group, then the licensee shall be entitled to retain its authorization only for the E-group and F-group. The remainder of its license would be forfeited (*i.e.*, BRS 1, BRS 2 and the H-group). Clearwire agrees with the WCAI that license forfeiture, and not bidding credits, is appropriate when the substantial service demonstration is not made. Forfeited frequencies would then be auctioned to the highest bidder. Requiring substantial service demonstrations for each channel group subject to a BTA authorization is consistent with most commenters’ proposals that the Commission should no longer issue blanket licenses for BTAs encompassing all available commercial spectrum. Instead, most commenters advocate that the Commission should auction and license EBS and BRS spectrum on an individual channel or channel group basis for each BTA. Because new BTA licensees will be required to demonstrate

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Commission should reject commenters' proposals, including Bellsouth, Nextel, Sprint, CTN/NIA, and the ITFS Alliance, to adopt a substantially relaxed standard that would not require substantial service demonstrations for each EBS and BRS license / call sign. These commenters urge adoption of a "system-wide" substantial service requirement in which licensees can take credit for deployments over *other* licenses associated with their wireless broadband system even if the licensee cannot satisfy the standard based upon deployments over its own licensed spectrum.³⁷

WCAI proposes a slight modification of the system-wide demonstration approach in its comments under which a call sign would be entitled to a finding of substantial service so long as the call sign is part of a system that is providing substantial service, and the spectrum at issue is either employed as guardband or is being held in reserve by the system operator for expansion.³⁸ WCAI does not explain how the Commission could evaluate whether "a system" is providing substantial service. Is it enough, for example, for one of 13 call signs in a "system" to provide coverage to 20 percent of the population in a geographic service area, or is something more required? Clearly, a system-wide standard is too lax and imprecise, and does nothing to ensure that spectrum is not warehoused, put to its highest and best use, and actively used to deploy services. The Commission has never adopted a system-wide substantial service demonstration in any other frequency band that would allow licensees to take credit for deployments over another

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substantial service for each license (channel group), current BTA authorization holders should be required to make the same demonstration.

³⁷ BellSouth Comments at 14-15; Nextel Comments at 4-5; Sprint Comments at 8-9; CTN/NIA Comments at 9; ITFS Alliance Comments at 7-8.

³⁸ WCAI Comments at 11-13.

licensee's spectrum, and this approach should not be incorporated now into the Commission's substantial service standards for EBS and BRS. Allowing licensees to warehouse spectrum for potential use at some later point hampers the rapid deployment of critical broadband services and is anti-competitive because new service providers that need spectrum to access the market are effectively barred from entry.³⁹

The Commission also should reject WCAI's and Bellsouth's proposals that a licensee receive substantial service credit for prior discontinued service.⁴⁰ Under this proposal, EBS or BRS licensees that provided service over their spectrum at one time, but have since discontinued service, could continue to allow the spectrum to lie fallow for the next nine to 10 years and nevertheless be afforded a renewal expectancy. This result is antithetical to the Commission's goals in this proceeding and the public interest.

Under Clearwire's proposal, which requires substantial service demonstrations on a per license basis (or a per channel group basis for current BTAs), licensees must quickly and effectively deploy all spectrum covered by each license, or forfeit the license for auction. Contrary to WCAI's assertion, Clearwire's proposed approach does not require complete license forfeiture for BTAs for failure to achieve substantial service. Clearwire advocates only forfeiture of spectrum for which substantial service cannot be demonstrated.

³⁹ *Id.*

⁴⁰ BellSouth Comments at 11-12 (“[T]he Commission should state definitively that the satisfaction of any ‘safe harbor’ *at any time during the existing license term* qualifies as ‘substantial service.’”) (emphasis in original); WCAI Comments at 13-14 (“[T]he Commission should make a finding of substantial service where the licensee demonstrates that it met the safe harbor at any time during the license term, as opposed to just at renewal time.”).

D. Special Educational Safe Harbors Are Not Warranted Except For Traditional Distance Learning Services Carried On MBS Channels.

Clearwire does not oppose a special educational safe harbor for traditional distance learning services offered over MBS channels, but urges the Commission to reject extending an educational safe harbor for Lower Band Segment (“LBS”) or Upper Band Segment (“UBS”) channels.⁴¹ LBS and UBS channels, the majority of which are licensed to EBS eligibles, will be predominantly used for commercial, low-power wireless broadband services, some of which may be offered to educational institutions. Because up to 95 percent of EBS spectrum in the LBS and UBS channels likely will be leased for commercial purposes, it should not be exempted from required substantial service demonstrations. For the same reason, EBS licensees should not be exempted from making substantial service demonstrations through 2015 as HITN suggests.

Under the secondary markets rules, EBS licensees, as part of their substantial service demonstrations, may take credit for build out by spectrum lessors on EBS channels.⁴² Credit for deployments on leased spectrum can be taken, however, only for services deployed over the licensee’s own leased channels. As discussed above, a system-wide substantial service demonstration, as suggested by the ITFS Alliance, will only encourage warehousing of spectrum and is therefore not in the public interest.

⁴¹ CTN/NIA, HITN and the ITFS Alliance proposed special educational safe harbors. CTN/NIA and the ITFS Alliance proposed a safe harbor for EBS licensees in which substantial service can be proved by demonstrating service to educational institutions, and meeting or exceeding the Commission’s educational usage requirements for EBS licensees. CTN/NIA Comments at 9; ITFS Alliance Comments at 7. HITN proposes that EBS licensees should be exempt from making substantial service demonstrations until 2015. HITN Comments at 3. The ITFS Alliance proposed that EBS licensees that lease spectrum to BRS providers should meet the substantial service requirement if the wireless system that includes their channels meets a system-wide substantial service safe harbor. ITFS Alliance Comments at 7-8.

⁴² See 47 C.F.R. §§ 1.9005(h)-(i); 1.9020(d)(5).

II. THE COMMISSION SHOULD NOT DELAY THE EBS WHITE SPACE AUCTION UNTIL AFTER THE THREE-YEAR TRANSITION PERIOD.

Commenters generally support early auctions of defaulted BRS BTA authorizations. Most commenters, including Clearwire, Sprint, Nextel and WCAI, support an auction of defaulted BRS BTA authorizations as soon as practicable after adoption of the order on reconsideration in this proceeding.⁴³ WCAI and HITN also support Clearwire's proposal for an expeditious EBS white space auction, ideally in conjunction with the first auction of BRS BTA authorizations.⁴⁴

Sprint, Nextel and CTN/NIA oppose an EBS white space auction until after the three-year transition period.⁴⁵ Clearwire supports WCAI's proposed approach to address Nextel's and Sprint's concern that an early EBS white space auction might complicate and add costs to the transition.⁴⁶ WCAI suggests in its comments that an early auction would not add complexity and cost to the transition, if purchasers of EBS white space have no entitlement to new downconverters or program track migration.⁴⁷

The Commission also should reject CTN/NIA's proposal to delay the EBS white space auction until after the three-year transition.⁴⁸ Although educators, EBS eligibles, may require some lead time to prepare for an EBS white space auction, a delay of three or more years to

⁴³ Clearwire Comments at 5; Sprint Comments at 2-3; Nextel Comments at 7-8; WCAI Comments at 20-21.

⁴⁴ Clearwire Comments at 5; WCAI Comments at 21-22; HITN Comments at 4.

⁴⁵ Sprint Comments at 3-4; Nextel Comments at 8; CTN/NIA Comments at 11.

⁴⁶ Sprint Comments at 3-4; Nextel Comments at 8.

⁴⁷ WCAI Comments at 21-22.

⁴⁸ CTN/NIA Comments at 11.

auction this valuable spectrum is not justified or necessary. The EBS community has been aware that the Commission intends to auction EBS spectrum since 1997.⁴⁹ The FCC reiterated in its April 2003 *NPRM* in this proceeding that it intends to auction vacant EBS spectrum.⁵⁰ In the interest of creating opportunities for new entrants, facilitating the speed of transition and deployment in the band, and facilitating the highest and best use of the spectrum, the Commission must not unnecessarily delay auctions for EBS spectrum, particularly given that EBS spectrum represents 60 percent of the spectrum in the 2.5 GHz band.

Clearwire would not oppose an auction of EBS white space within one year after adoption of the order on reconsideration in this proceeding, but urges the Commission to move as swiftly as possible to auction this valuable spectrum so that it can be used to promptly deploy wireless broadband services to the public. The Commission typically affords four to six months between releasing a public notice seeking comment on auction procedures and commencing an auction.⁵¹ Once the Commission adopts final BRS/ EBS service rules in this proceeding, it can

⁴⁹ On August 5, 1997, Congress enacted the Budget Act, which expanded the Commission's auction authority under Section 309(j) of the Communications Act to include commercial broadcast applicants, including ITFS applicants. *See Implementation of Section 309(j) of the Communications Act – Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses*, 13 FCC Rcd 15920, 15921 (1998) (“We adopt general competitive bidding procedures to select among mutually exclusive applicants for... Instructional Television Fixed Service (ITFS) licenses.”).

⁵⁰ *Report and Order*, 19 FCC Rcd at 14167 ¶ 1; *NPRM*, 18 FCC Rcd at 6749-54.

⁵¹ *See* Auctions Section of the Federal Communications Commission Website, *About Auctions: How is an Auction Initiated*, available at http://wireless.fcc.gov/auctions/default.htm?job=about_auctions&page=3.

immediately begin the auction process, and auctions could occur as early as four to six months thereafter.⁵²

III. THE COMMISSION MUST HONOR BRS BTA AUTHORIZATION HOLDERS' RIGHT TO APPLY FOR VACANT COMMERCIAL EBS SPECTRUM.

As Clearwire and Choice Communications stated in their comments, the Commission should not eliminate the so-called “wireless cable exception” that allows commercial interests to apply for vacant EBS spectrum under certain conditions enumerated in the rules.⁵³ New entrants that have recently acquired BTA authorizations, like Clearwire, remain in dire need of spectrum in all parts of the country in order to deploy broadband services. BTA authorization holders are solely entitled to apply for commercial EBS spectrum pursuant to the *BTA Auction Order* to the extent any commercial EBS spectrum exists in the BTA.⁵⁴ This valuable right, held and purchased by BTA authorization holders, must be retained. Under Section 27.1201 of the rules and the *BTA Auction Order*, BTA authorization holders currently have the authority to apply for commercial EBS spectrum, and should continue to have this authority at least until the Commission undertakes an EBS white space auction. As discussed below, the Commission should complete its reconciliation of the ULS database before this rulemaking is concluded so

⁵² For example, in Auction Nos. 35, 42, and 44, the Commission held auctions between four and eight months after adopting allocation and service rules.

⁵³ Clearwire Comments at 21-23; Choice Communications Comments at 2; *see also Further Notice*, 19 FCC Rcd at 14292-93 ¶¶ 347-50. WCAI supports retention of this rule, and exercise of rights thereunder prior to the EBS white space auction, in its reply comments. The former rule was codified in Sections 74.990-992 of the Commission’s rules, 47 C.F.R. §§ 74.990-74.992 and the new rule is contained in Part 27 at Section 27.1201(c), 47 C.F.R. § 27.1201(c).

⁵⁴ *Amendment of Parts 21 and 74 of the Commission’s Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service*, Report and Order, 10 FCC Rcd 9589, 9612-13 ¶¶ 41-42 (1995) (“*BTA Auction Order*”).

that BTA authorization holders can determine if commercial ITFS opportunities exist in their BTAs.

Clearwire also supports WCAI's proposal that the Commission treat commercial EBS spectrum like BRS BTA spectrum for all purposes,⁵⁵ including filing requirements (forms and fees), payment of regulatory fees, and geographic service areas. Similar to other BRS BTA authorizations, the Commission should issue blanket authorizations for commercial EBS spectrum on a BTA basis.

IV. THE COMMISSION SHOULD RECONCILE THE ULS DATABASE BEFORE UNDERTAKING ANY AUCTIONS.

Clearwire urges the Commission to complete its reconciliation of the Universal Licensing System ("ULS") database to reflect only valid licenses so that auction participants can complete necessary due diligence.⁵⁶ The lack of a reliable reference resource for BRS and EBS spectrum will discourage investment in this band because auction participants will have difficulty evaluating or assigning value to assets that the Commission intends to auction.⁵⁷

⁵⁵ WCAI Comments at 30-31 ("[T]o simplify the regulatory treatment of commercial EBS stations under the new rules, the Commission should simply reclassify such stations as BRS and regulate them accordingly. There is no regulatory benefit to preserving the current subclass of commercial EBS stations.").

⁵⁶ See, e.g., *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Report and Order, 18 FCC Rcd 25162, 25183-84 ¶¶ 53-54 (2003) (denying a request for additional information regarding incumbents and potential relocation costs above and beyond what is available through the Commission's databases). Clearwire is not suggesting that the Commission cancel licenses for which appeals are pending, or dismiss pending applications in which applicants, licensees or permittees have expressed continuing interest.

⁵⁷ The Commission routinely advises applicants in auctions involving encumbered spectrum to perform due diligence to determine whether any incumbents will affect the availability of auctioned licenses and directs applicants to its existing databases. For example, the Commission stated that applicants can use its databases for due diligence purposes include Auction Nos. 18, 20, 24, 26, 31, 40, 42, 43, 44, 48, 49, 53, 55, and 56. The Commission also often provides due diligence lists of incumbents and pending matters that may affect the status of

(Footnote continues on next page.)

Reconciliation of the ULS database requires only that the Wireless Telecommunications Bureau (“WTB”) finish the Broadband Licensing System (“BLS”) corrections project that it started three years ago to ensure that information in ULS is accurate, current and comprehensive.⁵⁸ Based upon the volume of responses and corrections submitted, the Commission is well aware that licensing information available in BLS, and now ULS, is woefully incomplete and inaccurate.⁵⁹ Completion of the reconciliation is not dependent on this rulemaking. Thus, there is no reason to delay completing the reconciliation until the end of the proceeding.

Updating ULS will identify vacant BRS spectrum that BTA authorization holders can deploy, identify vacant EBS spectrum that is either subject to application by BTA authorization holders or can be auctioned, and assist potential auction bidders to assess the value of auctioned spectrum. Moreover, reconciliation will benefit Commission staff by identifying viable licenses

(Footnote continued from previous page.)

licenses that are to be auctioned, such as it did in Auction Nos. 18, 24, 26, 31, 40, 42, 43, 44, 48, 49, and 53.

⁵⁸ When administration of EBS and BRS spectrum became the responsibility of the WTB in 2002, the WTB began a comprehensive migration process by which information in the legacy BLS system was moved to the ULS system. *See* FCC Public Notice, *Wireless Telecommunications Bureau Seeks to Verify ITFS, MDS, and MMDS License Status and Pending Applications*, 17 FCC Rcd 20538 (2002); FCC Public Notice, *Wireless Telecommunications Bureau Seeks to Verify ITFS, MDS, and MMDS Pending Legal Matters*, 17 FCC Rcd 20543 (2002).

⁵⁹ For example, as the WTB is aware, EBS spectrum, which represents the majority of spectrum in the 2.5 GHz band, was formerly assigned on a license basis, not on a construction permit basis. All EBS spectrum is therefore listed as “licensed” in ULS, whether or not the licensee filed a construction certification. All EBS licenses for which construction certifications were not filed (or for which there is not a pending extension request or other pleading) must be cancelled from the database. In addition, BRS licenses still show as “active” even if no renewal application was filed. These licenses must also be cancelled unless pleadings regarding the renewal are pending.

which must be transitioned to the new band plan and must demonstrate substantial service.

Thus, reconciliation of the ULS database will serve the industry, the Commission and the public interest.

V. THE COMMISSION SHOULD ASSESS REGULATORY FEES BASED ON MHZ/POPS.

Commenters addressing regulatory fees are unanimous that BRS regulatory fees should be assessed on a MHz/pops basis.⁶⁰ Nextel and WCA urged the Commission to establish clearer standards for determining the boundaries of, and the population contained within, a licensee's geographic service area.⁶¹ Clearwire agrees that the Commission should establish clear standards to enable BRS licensees readily to determine the population within geographic service areas and to ensure that regulatory costs are allocated equitably.

VI. CONCLUSION.

Clearwire urges the Commission to promptly adopt procedural and substantive rules for BRS and EBS, especially with regard to substantial service demonstrations and auctions. The adoption of a proper regulatory framework for implementing the new 2.5 GHz band plan will facilitate widespread and timely deployment of wireless broadband services, encourage competition in wireless broadband, prevent warehousing of EBS and BRS spectrum, create opportunities for new entrants, facilitate the speed of transition and deployment in the EBS/BRS band, and facilitate the highest and best use of the spectrum. Clearwire urges the Commission to resist any efforts to delay, weaken or eliminate proposals that will facilitate its objectives for deployment of EBS and BRS spectrum. Spectrum in the 2.5 GHz band has been largely

⁶⁰ See Choice Communications Comments at 2-3; Nextel Comments at 11-12; WCAI Comments at 32-33.

⁶¹ See Comments of Nextel at 11-12; Comments of WCA at 32-33.

underutilized for over 30 years, and the Commission must adopt rules once and for all that will promote the effective and efficient use of this spectrum to serve U.S. consumers.

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February 8, 2005

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I, Theresa Rollins, certify that I have on this 8th day of February, 2005, had copies of the foregoing **REPLY COMMENTS OF CLEARWIRE CORPORATION** delivered to the following via electronic mail:

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